DPS 123 FEBRUARY 1970

DEMAND AND PRICE Situation

OUTLOOK

NATIONAL AGRICULTURAL CONFERENCE
WASHINGTON, D.C.
FEBRUARY 16-19, 1970

ECONOMIC RESEARCH SERVICE · U.S. DEPARTMENT OF AGRICULTURE

Table 1.--Selected measures of economic activity

Item	Unit	1968 II	1968 III	1968 IV	1969 II	1969 III	1969 IV 1/	Year 1968	Year 1969 1/
Gross national product	Bil. dol.	858.7	876.4	892.5	924.8	942.8	953.1	865.7	932.3
Disposable personal income	Bil. dol.	587.4	593.4	604.3	622.0	639.0	647.1	590.0	629.6
Personal consumption expenditures	Bil. dol.	530.3	544.9	550.7	572.8	579.8	589.2	536.6	576.0
Food spending (excluding alcoholic beverages)	Bil. dol.	99.3	100.3	100.6	102.9	103.7	106.0	99.4	103.8
Implicit price deflator for GNP	1958=100	121.7	122.9	124.2	127.3	129.0	130.5	122.3	128.1
Unemployment rate 2/	Percent	3.6	3.6	3.4	3.5	3.7	3.6	3.6	3.5
Cash receipts from farm marketings	Bil. dol.	44.2	45.0	45.0	48.2	48.0	47.5	44.4	47.4
Farm production expenses	Bil. dol.	36.1	36.5	37.2	38.8	38.8	38.9	36.3	38.6
Realized net farm income	Bil. dol.	14.8	15.3	14.7	16.3	16.5	16.2	14.8	16.0
Agricultural exports 3/	Bil. dol.	1.5	1.4	1.7	1.7	1.4	1.9	6.2	5.9
Agricultural imports 3/	Bil. dol.	1.3	1.3	1.2	1.4	1.2	1.4	5.0	5.0
Prices received by farmers 4/	1910-14=100	260	263	263	279	279	283	261	277
Livestock	do.	283	295	293	320	330	334	288	322
Crops	do.	234	226	227	232	219	222	229	224
Prices paid by farmers 4/ 5/	do.	354	355	359	374	374	377	354	372
Wholesale price index, all commodities 4/	1957-59=100	108.5	109.0	109.5	112.6	113.4	114.6	108.7	113.0
Consumer price index, all items 4/	do.	120.4	121.9	123.3	126.9	128.7	130.5	121.2	127.7
All food	do.	118.7	120.3	120.9	124.1	127.2	128.4	119.3	125.5

1/ Preliminary. 2/ Unemployment as a percent of the civilian labor force. 3/ Actual values, not seasonally adjusted annual rates. 4/ Not seasonally adjusted. 5/ Including interest, taxes, and wage rates.

Departments of Agriculture, Commerce, and Labor.

THE DEMAND AND PRICE SITUATION

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Approved by

The Outlook and Situation Board

February 6, 1970

The summary of this report was also released on the above date

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The Demand and Price Situation
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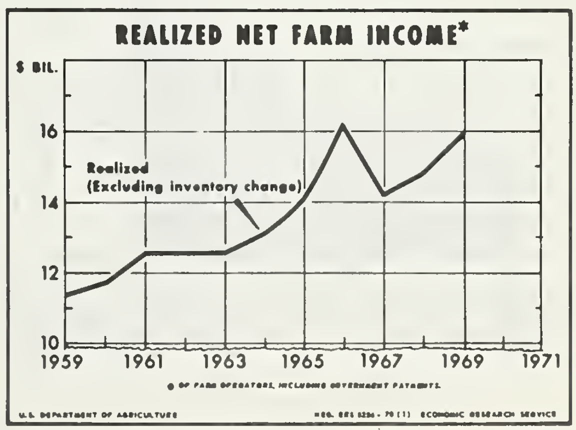
SUMMARY

Agriculture closed out the decade on a strong note, particularly for producers of livestock and products. Prospects for agriculture this year point to a continued high level of income. Reduced supplies of pork, lamb, veal, and vegetables in the first half coupled with strong domestic demand will likely hold farm product prices above a year earlier well into 1970. However, supplies may become more plentiful during the summer and fall. And, if inflation eases some as expected, prices late this year may average close to year-earlier levels.

For 1970 as a whole, cash receipts from farm marketings will likely continue to rise, but perhaps by only about half the $3 billion advance in 1969. The volume of livestock marketings this year will probably rise slightly. However, with continued demand growth also lifting average prices for livestock and products a bit, cash receipts to livestock growers may total 3 to 5% above the $28½ billion in 1969. Some increase in crop marketings may slightly more than offset lower average prices for crops this year. Thus, crop farmers' cash receipts are expected to run a little above the $18.9 billion in 1969.

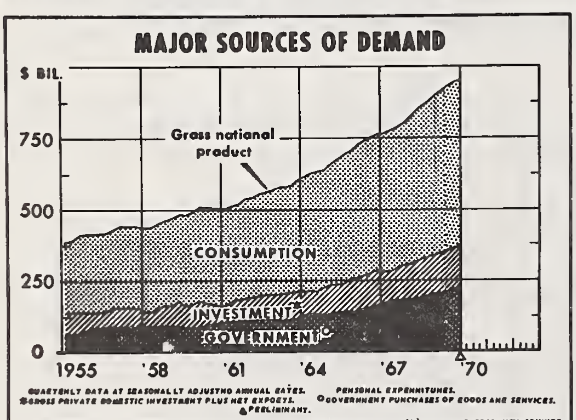
Direct government payments to producers may be slightly lower this year, but nonmoney incomes are expected to be



well maintained. Farmers' gross income may rise around $1½ billion over 1969. But production expenses continue to surge, and for the year may offset the gain in gross income. Thus, realized net farm income may about match 1969's level of $16 billion, which was $1.2 billion above 1968, and the third highest on record.

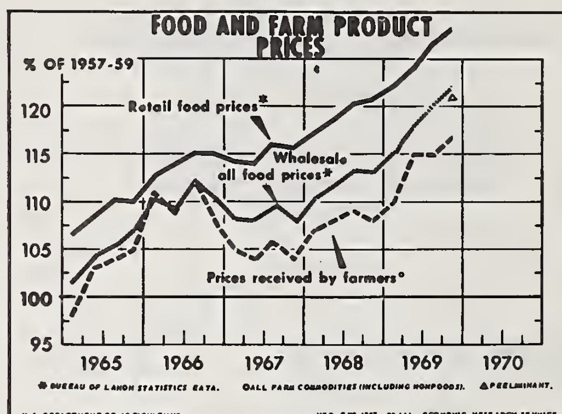
The economy appears to be slowing significantly as output of goods and services levels off, and employment and personal income gains continue smaller. Demand for durable goods has been particularly sluggish, causing some factories to limit output. Plant operating rates are the lowest since early 1962. Reduced output and rising costs have lowered corporate profits. In addition, housing starts are down sharply. Nevertheless, inflationary pressures remain strong although the overall advance in prices appears to be moderating.

Slowing economic growth and some easing in demand are expected to dominate the next 3-6 months. Although business investment is scheduled to rise through the first half, expensive and scarce credit plus lower sales volume may curb outlays for new plant and equipment. Current limitations on expenditures for defense, space, and construction programs will reduce government outlays and continue to affect heavy industries in selected localities.



Despite the moderation in general economic activity, disposable incomes--buoyed by higher wage rates, tax reductions, and increased social security payments--will continue to rise and help maintain consumer demand. Recent surveys of consumer intentions and trends in credit extensions indicate some caution and a growing resistance to rising costs. But smaller price increases coupled with a continued advance in consumer income should encourage buying.

An increasing population and larger per capita incomes are expected to result in a moderate expansion in food purchases in 1970. But the rise will probably be less than the rate of gain in disposable personal incomes. Thus, the percentage of the consumers' after-tax incomes spent for food will likely fall slightly below 1969's 16½%.

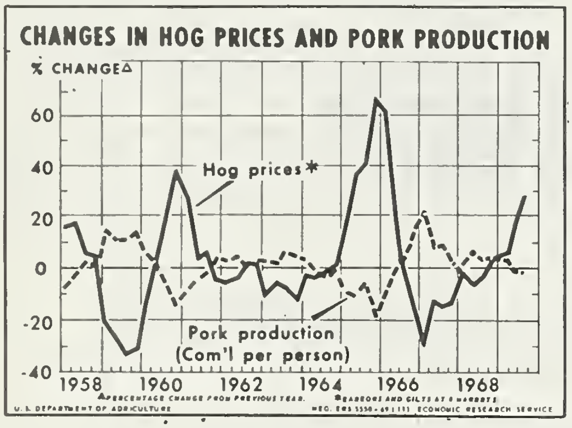


Responding to strong demand pressures and stable per capita food supplies, retail food prices advanced slightly more than 5% from 1968 to 1969. Despite recent sharp advances in food prices, slower increases are indicated for 1970. However, even if general inflationary pressures ease as expected, and supplies of livestock products pick up later in the year, retail food prices may average 3½-4% higher than in 1969.

The outlook for Major Commodities...

...Beef production this winter and spring will likely continue above a year earlier because of larger output of fed beef. Prices for steers, currently close to year-earlier levels, may strengthen some in coming months. During the spring they will probably trail last year's highs.

...Pork supplies are expected to remain considerably below a year ago in the first half of 1970; some pickup may occur later. A 4% larger pig crop is in prospect for this spring. Prices for hogs are currently running sharply above a year earlier. By spring, the margin over last year may ease some. By fall, hog prices may be under downward pressure.



...Broiler output is expanding sharply in the current quarter, and likely will continue well above 1969 the rest of the year. Prices, now close to 1969 levels, will probably ease as the year progresses.

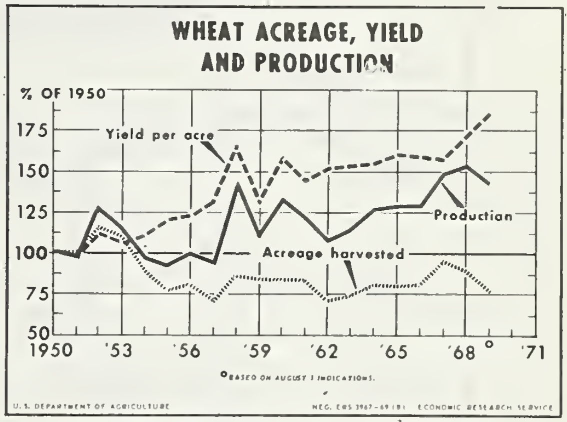
...Production of turkeys is expected to run substantially larger in 1970. However, reduced carryover is holding down total supplies. Thus, prices may average well above a year ago through the first half.

...Output of eggs will likely continue above a year ago in coming months. Prices, the highest since the 1950's, are expected to decline seasonally but continue above a year earlier through spring.

...Milk production in 1970 may decline slightly. Producer prices for milk are expected to rise above record 1969 levels.

...Feed grain use appears to be in fairly close balance with supplies again in 1969/70. And carryover into 1970/71 is expected to about match last season's 50 million tons. Prices have been a little above last season's levels.

...Supplies of wheat are moderately larger during 1969/70. So far this season, exports have been off slightly, and domestic use has held steady. However, extensive farmer use of the loan program and indications for some increase in exports have brightened wheat price prospects.



...Disappearance of soybeans has picked up sharply because of unusually strong demand for U.S. soybean products. Carryover at the end of the season may only slightly exceed year-earlier stocks.

...Total use of 1969/70 cotton is slightly under last season's low level. However, use is expected to be larger than the 1969 crop, and carryover next August is estimated at 6 million bales,

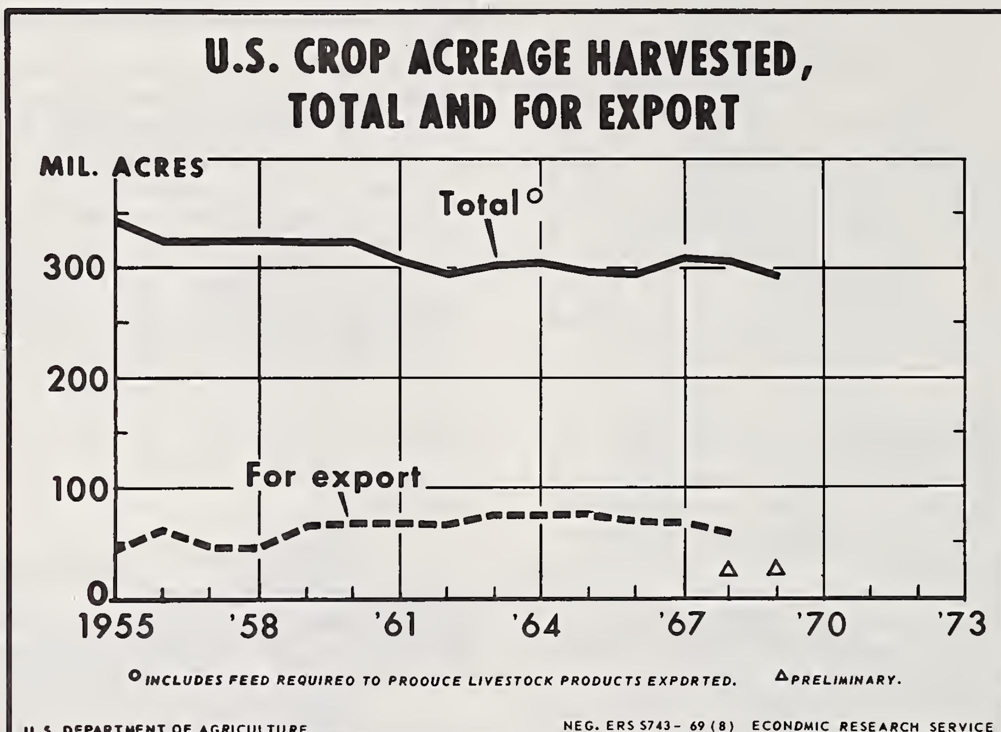
a half-million below last season's stocks.

...Tobacco supplies are slightly smaller this season because of reduced carryover. If total use matches last year's level, carryover at the end of the season will decline further.

...Supplies of fresh and processed fruit in the first half of 1970 are expected to total substantially larger than a year earlier. Prices are generally considerably lower. January 1 estimates pointed to a slightly larger citrus crop this season. However, the Florida crop suffered some freeze damage in early January; prices in coming weeks are expected to reflect the extent of the freeze.

...Fresh vegetable supplies during the next 6 to 8 weeks are expected to lag year-earlier levels. Grower prices recently have been up sharply and will likely continue relatively high in the next few weeks.

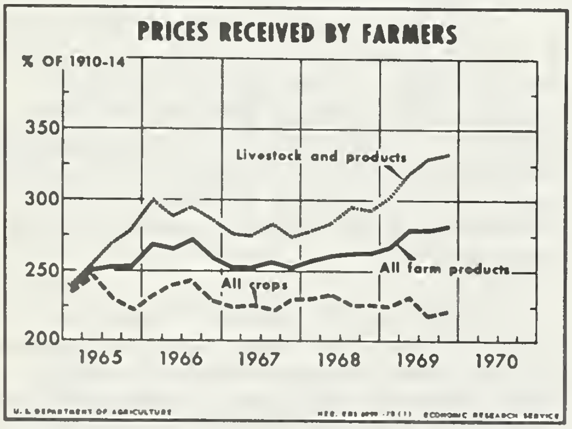
...Canned and frozen vegetable supplies are plentiful but moderately below the record levels of a year earlier. Market prices are above the depressed levels of a year ago and will likely remain so through the spring.



AGRICULTURAL SITUATION

Agriculture closed out the decade of the 1960's on a strong note, particularly for producers of livestock and products. Prices for farm products averaged 6% higher in 1969 and market receipts climbed to new highs. Realized net farm income increased during the year to a level of $16 billion, $1.2 billion above 1968 and the third highest on record.

As 1970 unfolds, prospects for agriculture point to a continued high level of income. In late 1969, reduced supplies of pork, veal, lamb, and fresh vegetables coupled with inflated demand pressures led to further increases in farm product prices. This basic supply-demand picture will probably continue until well into spring. But during the summer and fall, supplies of pork and vegetables are expected to become more plentiful. And if an easing in general price pressures develops as expected, prices for farm products likely will move close to year-earlier levels later this year.

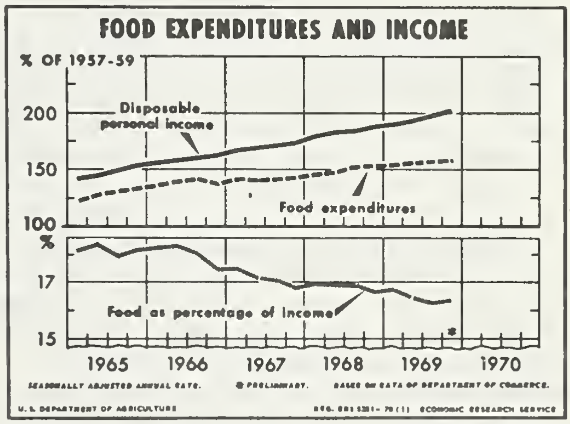


For 1970 as a whole, cash receipts from farm marketings will likely show a rise of around $1\frac{1}{2}$ billion. But production expenses continue to surge and probably will offset the gain in receipts. Thus, it appears that realized net farm income may about match the $16 billion of 1969.

Demand for Farm Products

Domestic and foreign sales of U.S. farm products continued to increase in 1969. U.S. consumers spent an estimated $180 billion combined for food, alcoholic beverages, clothing, leather products, tobacco, and other items containing products of farm origin. This was an increase of more than 5% over the 1968 pace, and represented about 29% of consumers' after-tax incomes.

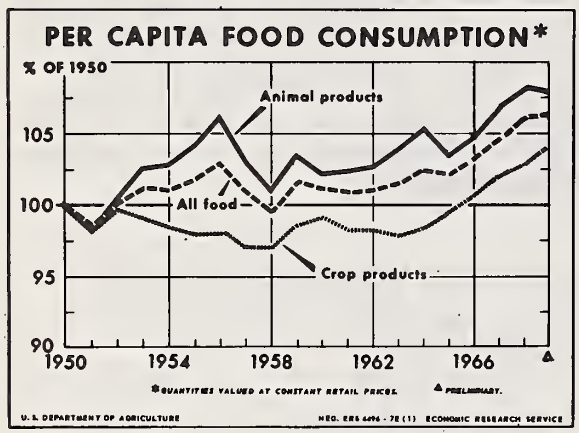
Despite a decided slowing in economic activity in late 1969 and prospects for some rise in unemployment this year, gains in disposable personal incomes are expected to be fairly well maintained in 1970. The reduction in personal income taxes, larger social security payments, and further wage rate increases will likely more than offset the effects on consumers' after-tax incomes of a slight rise in unemployment or further cutbacks in hours worked.



Consumer outlays for food expanded to $103.8 billion in 1969, up $4\frac{1}{2}$% from the previous year. The expenditure rise trailed the $6\frac{1}{2}$% advance in consumers' after-tax incomes, and also was much less than the food spending increase for 1968. Apparently consumers held down spending gains to some extent by switching to less expensive foods.

An increasing population with larger per capita incomes is expected to purchase more food in 1970. Current prospects point to another moderate rise this year, somewhere in the neighborhood of the 1969 increase. The proportion of disposable income spent for food is expected to decline from the record low 16½% in 1969.

Per capita consumption of food in total changed relatively little in 1969. A slight cutback in use of livestock and products was due to less pork, veal, lamb, eggs, and dairy products. This decline was slightly more than offset by an increase in the use of crop foods--largely reflecting more fruit and vegetable oils.



The outlook for supplies of livestock and products this year suggests that total per capita consumption of food may not change much from 1969. Moderate increases in per capita consumption of chicken and slight gains for beef, turkey, and eggs are expected to about offset further declines in other red meats and dairy products for the year. Per capita consumption of crop foods may hold relatively steady in 1970. Some increase is likely again for processed fruits and vegetable oils, and supplies of some vegetables may pick up later in the year.

Retail food prices averaged slightly more than 5% higher in 1969 compared with about a 3½% rise in the previous year. The more rapid increase last year was in response to strong demand pressures and higher costs coupled with stable per capita food supplies. With prices for food products at the farm level currently running well above a year earlier, some further rise is expected in prices at retail, particularly if supplies of pork and vegetables continue smaller. If general inflationary pressures ease and livestock product supplies pick up later in the year as expected, advances in retail food prices will slow materially. Even so, for the year as a whole, retail food prices will average higher, perhaps 3½ to 4% above the 1969 average.

Spending for alcoholic beverages rose moderately in 1969 to a level of $16.2 billion. Gains in consumption of malt liquor trailed increases for wines and distilled products. Approximately 79% of the adult male population and 63% of the adult female population drink alcoholic beverages. 1/ Because of the expected increase in consumer incomes, the growing acceptance of social drinking, and more leisure and recreation time, the demand for such beverages will likely increase moderately again in 1970.

Consumers expanded their purchases of clothing and shoes to nearly $50 billion in 1969, up nearly 8% from 1968. This amounts to about $245 per person annually. Retail prices for clothing and shoes have been rising rapidly in recent years and will likely account for the bulk of the expenditure increase for this group in 1970.

Although U.S. smokers spent more for cigarettes and other tobacco products in 1969, the increase was due to higher retail prices. Per capita consumption of cigarettes declined about 4% in 1969 because of 5% higher prices and anti-smoking publicity. This year, further price rises, continued smoking-health publicity, and possibly some slowing in economic growth are likely to either

1/ U.S. Industrial Outlook 1970, U.S. Department of Commerce.

level off or further reduce cigarette use. But expenditures for tobacco products will likely rise again slightly.

U.S. agricultural exports, value of major commodities

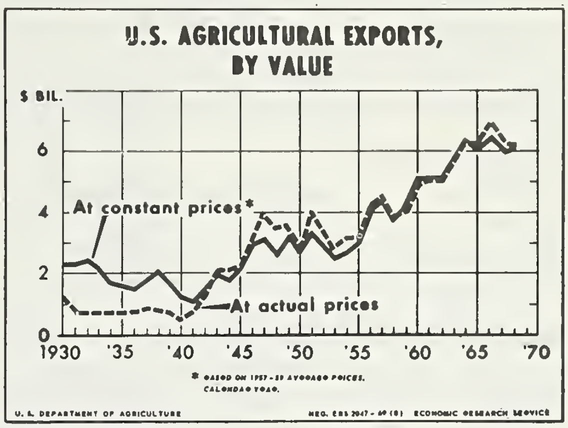
Commodity	July-Dec. 1968	July-Dec. 1969 1/	Percentage change 2/
	Mil. dol.	Mil. dol.	Pct.
Animals and animal products	359	380	6
Cotton	172	123	-28
Feed grains, excl. products	463	555	20
Fruits	152	188	24
Soybeans	456	494	8
Tobacco, unmfg.	315	348	10
Vegetables	81	92	14
Wheat and flour	492	429	-13
Rice	138	166	20
Other	480	529	10
Total exports	3,108	3,304	6

1/ Preliminary. 2/ Change computed from unrounded data.

Foreign demand for U.S. exports improved in late 1969. The value of U.S. agricultural exports during July-December 1969 rose 6% from a year earlier. Gains were widespread with oilseeds, tobacco, feed grains, vegetables, and most animal products leading the list. Declines in the value of dairy and poultry products, cotton, and wheat were partly offsetting.

Despite pressure from large foreign supplies, the value of farm exports for the rest of fiscal 1969/70 will likely continue above a year earlier. For the year as a whole, the value of U.S. farm exports is expected to show a gain of at least 5% over the $5.7 billion in 1968/69. Most of the increase is coming from larger shipments of grains, soybeans, fruits, vegetables, and animal products.

U.S. agricultural imports during July-December 1969 totaled $2.6 billion, about the same as the year-earlier period. The value of competitive (supplementary) imports in July-December was similar to last year at $1.6 billion. The value for noncompetitive (complementary) imports showed little overall change at $1.0 billion.



Output and Prices for Livestock and Products

Production of livestock and products increased only very slightly in 1969. This was the first time in several years that total output of livestock and products failed to keep pace with the increase in population. Even though production was record large, supplies were fairly tight compared with the strong demand. As a result, producer prices for livestock and products for the year averaged 12% higher.

Prices for livestock and products strengthened further in the closing months of 1969, reflecting reduced supplies of pork, veal, lamb, and milk, and strong advances in demand. These same supply demand conditions may continue in the first half of 1970.

Prices for livestock and products will likely continue above a year earlier into the first half of 1970, although increases in the spring are expected to trail last year's pace. If supplies of pork pick up after midyear, and inflationary pressures ease, hog prices may weaken some. However, for the year they are

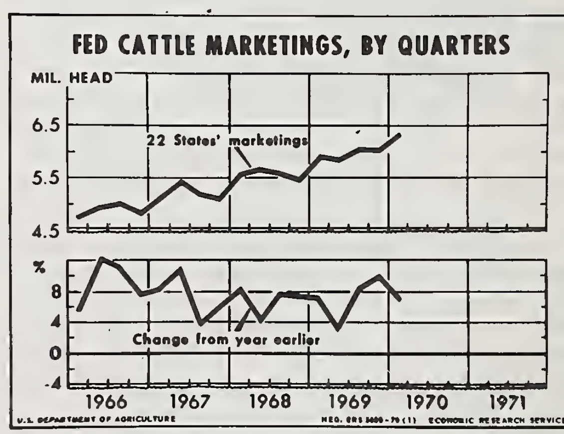
Table 2.--Production and prices received by farmers for major livestock and livestock products, 1967, 1968, 1969, and fourth quarters of 1968 and 1969

Item	Unit	Annual			Fourth quarter	
		1967	1968	1969 1/	1968	1969 1/
Production 2/						
Cattle and calves	Mil. lb.	21,011	21,610	21,842	3/5,407	3/5,597
Hogs	Mil. lb.	12,581	13,063	12,949	3/3,554	3/3,304
Sheep and lambs	Mil. lb.	646	602	543	3/ 147	3/129
Chickens	Mil. lb.	7,527	7,525	8,110	3/1,844	3/2,055
Turkeys	Mil. lb.	1,883	1,615	1,605	3/760	3/712
Eggs	Mil. lb.	9,163	9,070	8,999	2,213	2,247
Milk	Bil. lb.	118.8	117.3	116.2	4/27.0	4/27.0
Prices received by farmers						
Cattle	Dol./cwt.	22.30	23.40	26.20	23.20	25.20
Hogs	Dol./cwt.	18.90	18.60	22.90	17.70	25.10
Lambs	Dol./cwt.	22.10	24.40	27.30	24.40	27.40
Chickens	Ct./lb.	12.7	13.6	14.5	13.6	13.7
Turkeys	Ct./lb.	19.6	20.5	21.3	21.2	23.9
Eggs	Ct./doz.	31.2	34.0	39.6	39.7	47.8
All milk (wholesale)	Dol./cwt.	5.01	5.26	5.46	5.64	5.84

1/ Preliminary. 2/ Data for 50 States except where noted. Carcass weight production for red meats; ready-to-cook for poultry, and shell-weight for eggs. 3/ Data for 48 States. Commercial slaughter only. 4/ Based on monthly data.

expected to average slightly above those in 1969.

Modest gains in production of beef through the first half of 1970 are in prospect because of a larger supply of fed cattle. However, producer intentions suggest that output of pork will likely continue considerably smaller than a year earlier in the first half of 1970. In addition, sheep and lamb slaughter is expected to drop further. As a result, red meat supplies in the first half of 1970 may only slightly exceed year-earlier rates. But if demand for meat continues strong, producer prices for meat animals will likely continue well above a year earlier in the early part of 1970. Afterwards, the margin over a year earlier will probably narrow and prices may average around the high 1969 levels.

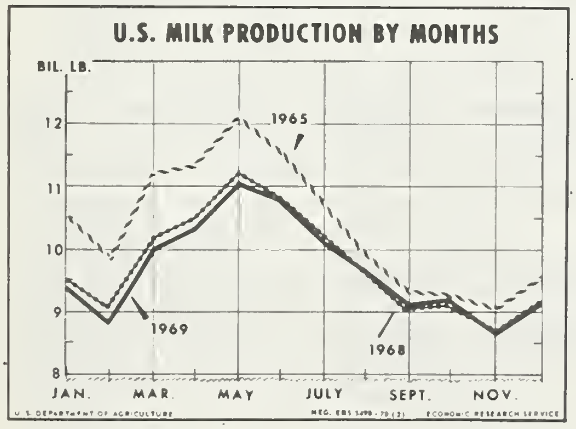


Broiler production continues to outpace year-earlier rates. Chick placements for slaughter during the first quarter suggest production may run 12 to

13% above a year ago. Output the rest of this year likely will continue well above 1969, but by a smaller margin. Prices for broilers are running near year-earlier levels despite larger production. As the year progresses, prices will likely ease below last year especially if pork production expands as expected late in 1970.

Turkey production is expected to increase substantially in 1970 in response to recent high producer prices relative to feed costs. But sharply reduced cold storage holdings will more than offset the expected increase in production during the first half of 1970. Thus, turkey prices are likely to average above those in 1969 in the first half; after that they may ease below the relatively high levels in late 1969.

Production of eggs began picking up recently and the larger laying flock indicates that output in the first half of the year will run 3 to 4% larger. Output in the last half of 1970 will likely continue to exceed 1969 rates. Although egg production recently has been larger than a year earlier, strong demand for eggs has pushed egg prices to their highest levels since the early 1950's. Prices are expected to ease from the recent highs, but continue above a year earlier during the first half of 1970.

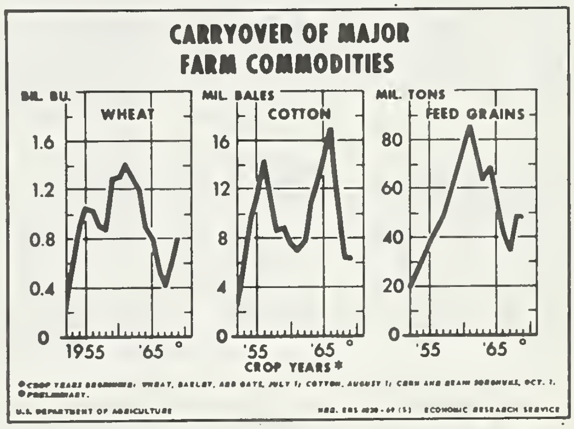


Milk production in 1970 may be down slightly from a year earlier. In 1969 it was estimated to be down only 1%. Lower carry-in stocks in 1970 will reduce dairy product supplies from 1969 levels. Producer prices and gross receipts from dairying will likely rise further from record 1969 levels.

Fewer sheep on farms and ranches this year will lead to some reduction in U.S. wool production. But foreign production continues to expand and prices received by U.S. growers for shorn wool in 1970 will probably average a little below 1969.

Crop Supplies and Prices

Supplies of crops are generally plentiful but prices are holding up fairly well as 1970 gets under way. Despite generally larger domestic use and exports for grains and soybeans, bigger carry-in stocks and the large 1969 crops of feed grains and soybeans have boosted current holdings.



Prospects for continued strong demand for feed grains point to a carryover in 1970/71 about the same as the 50 million ton carryover at the beginning of the 1969/70 season.

Unusually strong demand for U.S. soybean products (soybean meal and oil) is substantially expanding total use of soybeans during 1969/70. In fact, uncertainties in world supplies of fish meal, fish oil, and sunflower oil may increase U.S. soybean utilization enough to almost balance the 1969 crop. If so, carryover at

Table 3.--Supply-distribution and season average prices of selected major crops, 1966/67, 1967/68, 1968/69, and 1969/70

	Unit	Beginning stocks	Imports	Production	Total supply	Domestic use	Exports	Total use	Ending stocks	Season average price 1/
Feed grains										
1966/67	Mil. tons	42.1	0.3	157.6	200.0	140.9	22.0	162.9	37.1	2/1.24
1967/68	Mil. tons	37.1	.3	176.0	213.4	141.8	23.3	165.1	48.3	2/1.03
1968/69 p.	Mil. tons	48.3	.3	168.9	217.5	148.9	18.4	167.3	50.2	2/1.08
1969/70 e.	Mil. tons	50.2	.3	174.2	224.7	155.0	19.7	174.7	50.0	2/1.13
Wheat										
1966/67	Mil. bu.	535.2	1.7	1,311.7	1,848.6	679.3	744.3	1,423.6	425.0	1.63
1967/68	Mil. bu.	425.0	.9	1,522.4	1,948.3	647.8	761.1	1,408.9	539.4	1.39
1968/69 p.	Mil. bu.	539.4	1.1	1,576.2	2,116.7	754.0	544.1	1,298.1	818.6	1.24
1969/70 e.	Mil. bu.	819	1	1,459	2,279	780	600	1,380	899	1.23
Rice										
1966/67	Mil. cwt.	8.2	3/	85.1	93.3	4/33.2	51.6	84.8	8.5	4.95
1967/68	Mil. cwt.	8.5	3/	89.4	97.9	4/34.2	56.9	91.1	6.8	4.97
1968/69 p.	Mil. cwt.	6.8	3/	104.1	110.9	4/38.5	56.2	94.7	16.2	5.00
1969/70 e.	Mil. cwt.	16.2	3/	91.3	107.5	35.5	45.1	80.6	26.9	4.92
Soybeans										
1966/67	Mil. bu.	35.6	0	928.5	964.1	612.4	261.6	874.0	90.1	2.75
1967/68	Mil. bu.	90.1	0	976.1	1,066.2	633.3	266.6	899.9	166.3	2.49
1968/69 p.	Mil. bu.	166.3	0	1,103.1	1,269.4	658.2	286.8	945.0	324.4	2.43
1969/70 e.	Mil. bu.	324.4	0	1,116.9	1,441.3	736	340	1,076	365	2.31
Cotton 5/										
1966/67	Mil. bales	16.9	.1	9.8	26.8	9.5	4.7	14.2	12.5	20.84
1967/68	Mil. bales	12.5	.1	7.2	19.9	9.0	4.2	13.2	6.4	25.59
1968/69 p.	Mil. bales	6.4	.1	11.0	17.5	8.2	2.7	11.0	6.5	22.15
1969/70 e.	Mil. bales	6.5	6/	10.0	16.6	8.2	2.5	10.7	5.9	21.3

1/ Dollars per bushel, except cotton which is cents per pound. 2/ Price for corn. 3/ Less than 50,000 cwt. 4/ Includes the following statistical discrepancies: 1966/67, 1.3, 1967/68, 0.6, and 1968/69, 2.8 mil. cwt. 5/ Total cotton supply includes city crop and production prior to August 1 (end of season). 6/ Less than 50,000 bales. p. Preliminary. e. Estimated. Details may not add to totals due to rounding.

the end of the season would only slightly exceed last year's 324 million bushels.

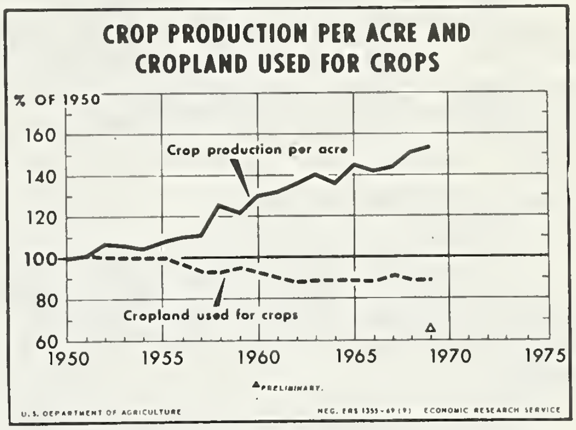
Total use of cotton during 1969/70 is falling slightly under last season's 11 million bales. But this utilization rate would exceed the reduced 1969 crop, and carryover next summer is estimated at 6 million bales, a half million below last August's stocks and the smallest since the early 1950's.

Among the food crops, total supplies of both fresh and processed fruits during the first half of 1970 are expected to be up substantially. Most items share in the increase, and as a result, prices are considerably below year-earlier levels.

January 1 indications were that this season's citrus crop will be 3% above last year's large output, possibly exceeding the record 1966/67 crop. Subsequently, however, the Florida crop suffered some freeze damage, and juice yields will be reduced from earlier expectations. Recent grower prices for grapefruit have been above a year earlier, but prices for other citrus fruits generally are the same or lower. Prices in coming weeks are expected to reflect the extent of the freeze damage. Supplies of deciduous fruits are substantially larger this winter, reflecting the 12% bigger crop. Shipping point prices for major items, running below a year earlier, are expected to continue under downward pressure.

Fresh vegetable supplies during the next 6 to 8 weeks are expected to be smaller than a year earlier. Production will likely be moderately lower for some of the hardier vegetables, and supplies of most tender crops will be curtailed as a result of freezing temperatures in Florida and Texas. Grower prices for fresh vegetables in January averaged substantially above a year earlier. Prospective smaller supplies and strong consumer demand indicate prices for most fresh items will continue relatively high.

Supplies of processing vegetables remain large but moderately below last year's record highs. Large carryover stocks are partially offsetting reduced production. Markets for most processed items are above the depressed levels of a year ago, and will likely remain so through the spring.



Although it is still early to forecast output of the 1970 crops, some further reduction in acreage is now in prospect for some of the major program crops. Programs for 1970 crops were designed to gear output more closely in balance with prospective demand.

The wheat program for 1970 is basically the same as for last year. However, the acreage allotment for wheat has been reduced 6 million acres to 45½ million acres. Acreage seeded to winter wheat for harvest in 1970 is down 11%, about the amount expected.

The 1970 Feed Grain Program also carries the same basic provisions as last year, although the acreage diversion payment will be lower. Assuming a further expansion in demand in 1970/71, and participation similar to that in 1969, feed grain supplies would be expected to continue fairly well in balance and prices would probably continue around 1969/70 levels.

The 1970 Upland Cotton Program is designed to encourage increased plantings. The national acreage allotment was increased 1 million acres to 17 million. Acreage diversion will not be required and payments will not be made for voluntary

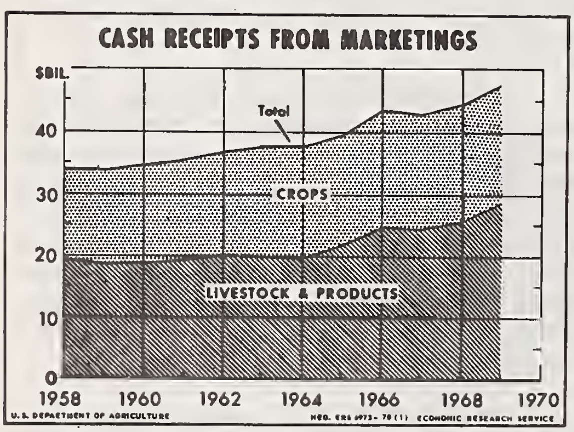
diversion. The 1970 loan rate for cotton (Middling 1-inch at average locations) remains unchanged. However, the price support payment is up sharply from 1969.

The acreage allotment for burley tobacco in 1970 has been reduced 10% from last year. However, the effective poundage quota for flue-cured tobacco is about 1% larger because of undermarketings in 1969.

Outlook for Farm Income

Farm cash receipts will likely increase in 1970 by only about half as much as the $3 billion rise in 1969. Most of the gain will again go to livestock producers.

The volume of livestock marketings in 1970 is expected to run slightly larger with more fed beef, poultry and eggs accounting for most of the increase. However, continued demand growth in 1970 will likely boost average prices for livestock and products slightly. Thus, cash receipts to livestock producers may run 3-5% larger than the $28½ billion in 1969. Most of the gains are expected to come in the first half of the year, particularly if pork production expands as expected and inflationary pressures ease later in the year.



Cash receipts from crop marketings are expected to total slightly over the $18.9 billion rate in 1969. Some increase in the volume of crop marketings may more than offset slightly lower average prices for crops. Market receipts from crop sales this year will likely drift lower for wheat, fruit, and possibly vegetables, but slight gains are expected for feed grains and cotton.

Realized gross farm income, reflecting the above cash receipt picture, is expected to show a gain of around $1½ billion for the year. Direct government payments to producers may ease slightly lower, and nonmoney incomes to farmers will likely be well maintained. However, farm production costs continue to surge and for the year they may rise enough from 1969's $38.6 billion to absorb the gross income gain expected this year. Thus, realized net farm income for 1970 will likely total close to the $16 billion for 1969, a level which has been exceeded only twice.

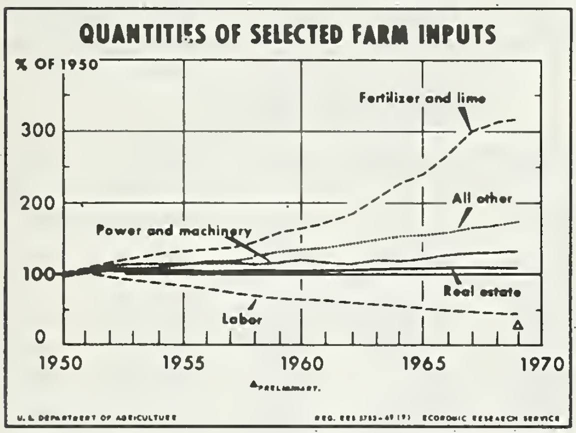
Net incomes from farming will be well maintained and thus contribute to an increase in per capita disposable personal incomes of farm people. Incomes per person from nonfarm sources are also expected to expand. As a result, average after-tax incomes from all sources for farm people will reach new highs in 1970.

Farm peoples' per capita disposable personal income from all sources has shown substantial improvement in the last decade and a half. During the mid-1950's, average after-tax incomes of farm people were only about half those for nonfarm people. But by the end of the decade of the 1960's, they had risen to three-fourths. This improvement in relative position reflects growth in net farm income, as well as steady increases in incomes from nonfarm sources. An important factor has also been the steady decline in the farm population while the nonfarm population has continued to grow.

Farm Input Costs

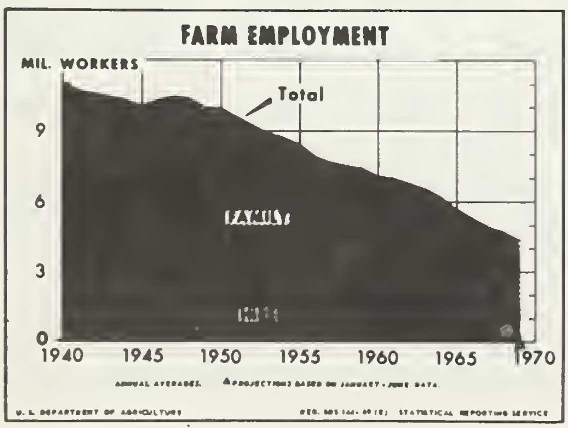
The agricultural sector purchased $38.6 billion worth of production goods and services in 1969, more than 6% over the 1968 level. The largest proportion

of purchases represented interfarm sales of feeder livestock, feed, and seed. In addition, farmers also invested approximately \$6.2 billion (gross basis) into capital equipment in 1969, about the same as in the previous year.



Prices paid for production items, including interest, taxes, and wage rates rose almost 6% during 1969. Prices advanced in all major farm input categories except fertilizer. Largest increases were recorded for feeder livestock, interest, taxes, and wage rates.

Wage rates for farm workers registered a 10% average gain in 1969. Regional data indicate that wages also gained sharply in all areas in early 1970. Pressure for further wage increases is expected to continue this year as a result of demands for higher salaries coupled with a dwindling supply of farm laborers.



Excess supply continued to depress fertilizer prices in 1969. For example, anhydrous ammonia sold for \$140 per ton in 1960, but was only around \$73 per ton last September. The outlook indicates some increase in purchases this year, especially if weather cooperates during the planting season.

In the equipment market, retail sales of farm tractors during 1969 were running 8% below the same period of 1968 according to the Farm and Industrial Equipment Institute. This decline in sales was consistent throughout the year except for May and June. Sales data through November 1969 showed a trend away from medium size units and a step-up in purchases of tractors of 100 horsepower and over. For 1970, tractor sales will probably continue sluggish. Repeal of the investment tax credit, higher machinery prices, and tight credit conditions will likely dampen retail tractor purchases.

Farm machinery retail sales (excluding tractors) during 1969, as reported by Farm and Industrial Equipment Institute, showed unit sales lagging in most major categories. However, slight increases were noted in sales of some haying equipment. Depressed sales of grain combines again had a significant impact on the value of machinery sales. As in the tractor market, the volume of other farm machinery sold in 1970 will likely be affected by the repeal of the investment tax credit, higher machinery prices, tight credit conditions, and cutbacks in wheat acreage.

Farm Real Estate

The average value of farm real estate per acre increased 4% during the year ended November 1, 1969--the smallest rise since 1963. Price changes at State levels were highly variable. Arizona, Illinois, Indiana, and Kansas showed slight price declines. During the same period Georgia farmland prices rose 14%.

Prices are expected to soften in the Corn Belt and Western States in 1970. Slower rates of increase are expected in the South as credit for real estate purchases remains scarce.

Table 4.--General economic activity

(Seasonally adjusted annual rates)

Item	1969 I	1969 II	1969 III	1969 IV 1/	Year 1968	Year 1969 1/
	Billion dollars					
Gross national product	908.7	924.8	942.8	953.1	865.7	932.3
Gross national product (1958 prices)	723.1	726.7	730.6	730.5	707.6	727.7
Disposable personal income	610.2	622.0	639.0	647.1	590.0	629.6
Personal consumption expenditures	562.0	572.8	579.8	589.2	536.6	576.0
Durable	88.4	90.6	89.8	89.6	83.3	89.6
Nondurable	238.6	242.1	245.1	249.4	230.6	243.8
Services	235.0	240.1	244.9	250.2	222.8	242.5
Personal savings	32.5	33.3	43.1	41.6	38.4	37.6
Net government receipts	218.3	224.4	224.4	---	193.6	223.7
Government purchases	210.0	212.9	217.0	218.9	200.3	214.7
Federal	101.6	100.6	103.2	102.7	99.5	102.0
State and local	108.5	112.3	113.8	116.2	100.7	112.7
Deficit or surplus (on income and product accounts)	8.3	11.4	7.4	---	-6.7	9.0
Gross private domestic investment	135.2	137.4	143.3	142.4	126.3	139.6
Fixed investment	128.6	130.5	132.5	134.5	119.0	131.5
Residential	33.3	32.7	31.4	31.6	30.2	32.2
Nonresidential	95.3	97.8	101.1	103.0	88.8	99.3
Change in business inventories	6.6	6.9	10.7	7.8	7.3	8.0
Gross retained earnings	97.7	98.0	99.7	---	96.7	98.6
Excess of investment	-37.5	-39.4	-43.6	---	-29.6	-41.0
Net exports of goods and services	1.5	1.6	2.7	2.6	2.5	2.1
Per capita disposable personal income (1958 dollars)	2,482	2,494	2,526	2,521	2,474	2,507
Total civilian employment (millions) 2/	77.6	77.5	78.1	78.5	75.9	77.9

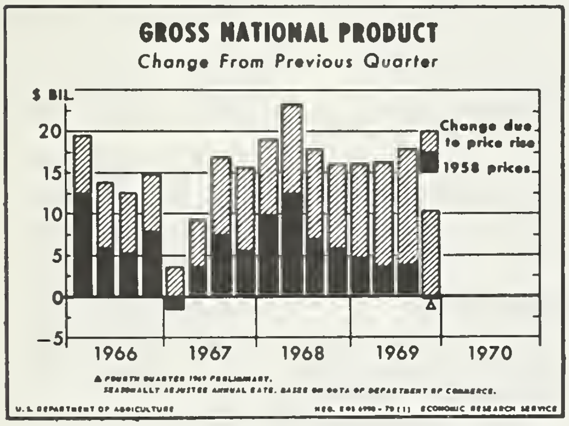
1/ Preliminary.

2/ U.S. Department of Labor.

U.S. Department of Commerce.

GENERAL ECONOMIC SITUATION

The signs of a slowing in economic activity were fairly widespread in the closing months of 1969. Output flattened at the third quarter rate as the decline in production of goods about offset the rise in services. Retail sales of autos and other durable goods were sluggish; corporate profits eased downward; and housing starts dropped sharply. Although the advance in the general price level continued large, the rise appeared to be moderating.



Employment declines in the goods producing industries largely offset the upward trend in service employment. Factory payrolls have declined and the December advance in personal income was the smallest gain in more than a year. And average hours worked per week were down significantly in many establishments with plant operating rates at their lowest since late 1962.

<u>Outlook for 1970</u>

Slower economic growth and some easing of inflationary pressures are expected to dominate the next 3-6 months. Although business investment is scheduled to rise through the first half, expensive credit plus lower sales volume may slow investment in plant and equipment. Current limitation on expenditures for defense, space, and construction programs not only will reduce government expenditures but also will continue to affect heavy industries.

GNP and final sales, change from previous quarter

Year		GNP	Final sales	Inventory change 1/
			Bil. dol.	
1967:	I	3.5	14.4	-10.9
	II	9.3	15.0	-5.7
	III	16.9	12.4	4.5
	IV	15.7	14.0	1.7
1968:	I	19.2	27.0	-7.8
	II	23.4	15.2	8.2
	III	17.7	20.4	-2.7
	IV	16.1	12.8	3.3
1969:	I	16.2	20.1	-3.9
	II	16.1	15.8	.3
	III	18.0	14.1	3.8
	IV 2/	10.3	13.3	-2.9

1/ Represents the difference in the rate of change in business inventories. For example, the change in business inventories in the fourth quarter of 1969 ($7.8 billion) less the change in the third quarter of 1969 ($10.7 billion) equals minus $2.9 bil.
2/ Preliminary.

Despite the easing in general economic activity and the likelihood of an increase in unemployment, there are some plus signs in view for producers and retailers. Disposable incomes, buoyed by tax reductions, increased social security payments, and rising wage rates will continue to rise and help to maintain consumer demand. Recent surveys of consumer intentions and a slower increase in the use of consumer credit indicate some caution and a growing resistance to rising costs. But smaller price increases coupled with a continued advance in consumer income should help to stimulate consumer purchases.

Outlays by State and local governments will continue their upward trend. Federal purchases, in total, are scheduled to hold relatively steady.

As the economy slows and price pressures ease, monetary policy may move to counter possibilities of too much cutback. If monetary conditions ease later in the year, the effect may be to stimulate investment outlays and arrest the decline in housing starts. For 1970 as a whole, the gross national product is expected to increase by around $50 to $60 billion compared with a nearly $70 billion gain in 1969. Growth in output may drop to less than 2%, as prices will average higher, even though year-to-year increases over 1969 continue to narrow.

Government Expenditures and Receipts

Realizing that large increases in Federal expenditures have been contributing to much of the excessive demand expansion in recent years, the Federal Government continued to slow its purchases of goods and services in 1969. In addition, revenues increased as a result of the 10% surtax on corporate and personal incomes, the extension of some excise taxes, and higher social security taxes. Combined, these fiscal actions moved the government account from a big deficit to a budget surplus.

Federal purchases are expected to rise very slightly above present levels during the first half of 1970 with some increase likely due to rising costs of mandatory programs. The budget for 1971 (beginning this June) provides for large reductions in defense expenditures and a number of established Federal programs will be trimmed. These reductions may be somewhat offset by increased obligations reflecting health and welfare needs.

The massive Tax Reform and Relief Act of 1970 passed by Congress in December will have a long-range effect upon the economy during the seventies. The Act changes tax rates and conditions for both the individual and corporation. The main immediate impact on Federal finances in calendar 1970 will result from the repeal of the 7% tax credit on equipment purchases retroactive to last April 18; extension of surtax at a 5% rate for the first half of 1970; and the 15% increase in social security payments starting in January but distributed in April. The 5% surtax and the extension of certain excise taxes are expected to bring in $4.2 billion above the pre-surtax rate.

Federal receipts and expenditures, national income basis 1/

Item	1968	1969	
	Second half	First half	Second half 2/
RECEIPTS	184.4	200.7	202.5
Personal tax	85.6	95.4	95.8
Corporate profit tax	39.1	40.8	40.0
Indirect business tax	18.4	18.6	19.0
Social insurance	41.3	46.0	47.8
EXPENDITURES	185.8	188.9	194.9
Goods and services	101.4	101.1	103.0
Transfer payments	49.4	51.4	53.2
Grants to State and local governments	18.7	19.2	20.6
Net interest paid	12.0	12.7	13.3
Subsidies less surplus	4.5	4.5	4.8
SURPLUS OR DEFICIT	-1.4	11.8	7.6

1/ Calendar years in billions of dollars, seasonally adjusted annual rates.
2/ Preliminary.

Repeal of the investment tax credit is the biggest single revenue raising item in the Act, bringing in about $3.3 billion per year. On the other hand, the 15% benefits increase would cost more than $4 billion a year from the social security trust fund. However, if the economy continues to slow, it will tend to cut back all types of receipts. On balance, it appears that the Federal government may be hard pressed to maintain a surplus in the second half of calendar 1970.

Expenditures by State and local governments rose about 12% in 1969, slightly less than 1968's increase. For 1970, these expenditures are expected to increase at about the same rate despite the difficulties in raising additional revenues. A slight slowing is in prospect for grants-in-aid to States from the Federal Government.

Major GNP components, change from previous quarter

Item	1969 II qtr.	1969 III qtr.	1969 IV qtr. 1/
	Bil. dol.		
Total change in GNP	16.1	18.0	10.3
Consumption	10.8	7.0	9.4
Private nonresidential fixed investment	2.5	3.3	1.9
Housing	-.6	-1.3	.2
Inventory 2/	.3	3.8	-2.9
Net exports	.1	1.1	-.1
Government	2.9	4.1	1.9

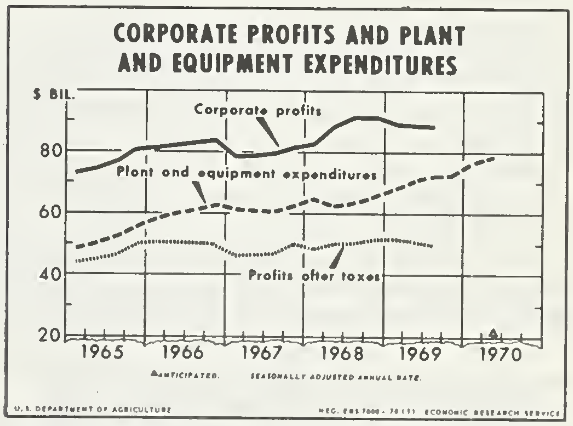
1/ Preliminary. 2/ See footnotes 1/, text table, page 17.

Investment Demand

Business fixed investment was one of the strongest sectors of demand in 1969. Accelerating beyond the recovery it made in 1968, nonresidential fixed investment rose nearly 12%, far more than the gross national product. Many of the expenditure increases were for new plant and equipment although construction outlays also gained substantially, Private and public surveys of new business investment plans show a large but less rapid rate of increase for 1970 despite repeal of the investment tax credit, lower corporate profits, and prospects of lower sales. Apparently, longer-range hopes of an expanding market have outweighed the shorter 1970 outlook. But, of course, a radical slowdown in the economy might quickly alter present plans.

Housing expenditures started off fairly strong at the beginning of 1969, but soon faltered as monetary conditions tightened further. The demand for housing has grown considerably as new family formations occur and personal incomes rise, but monetary conditions have made credit scarce and interest rates have risen sharply. The demand for money in the consumer and investment markets has diminished funds available for mortgages. Many home buyers must pay 9-10% interest on their loans and a large down payment. Most authorities agree that a recovery in housing in 1970 depends very much upon the easing of tight monetary conditions and some moderation in high construction costs.

For the economy as a whole, slower sales advances resulted in a larger inventory accumulation in 1969 than in the two previous years. However, smaller build-up in the fourth quarter of 1969 proved to be one of the main reasons for the relatively small increase in current dollar gross national product in that period. This adjustment in inventories may provide room for increased accumulation in 1970 and incentive for additional production.

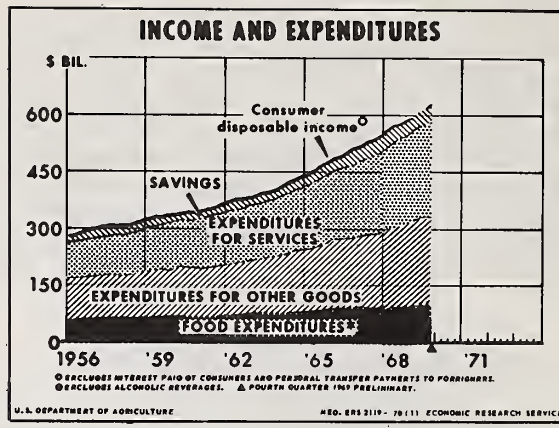


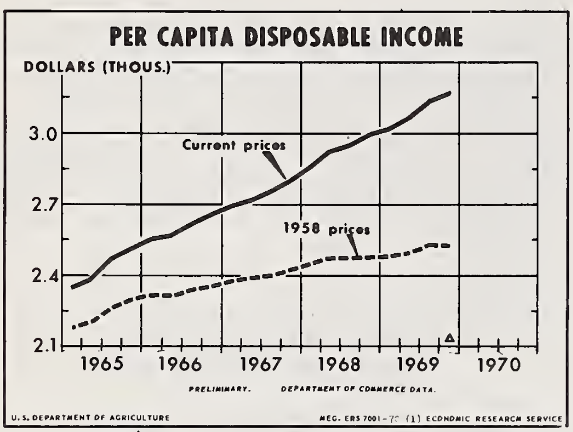
Consumer Demand

Consumer demand remained very strong throughout 1969, but its advance fell below 1968's rapid pace. Rising personal incomes and generally lower rate

of personal savings enabled consumers to overcome the restraining effects of the 10% surtax. Expenditures for some non-durable goods and most services made impressive gains but those for durable goods particularly automobiles were generally slow. Durable sales are being hurt by the declining housing market and by the large volume of earlier sales in recent years.

If disposable incomes increase as expected, consumer demand is likely to improve accordingly. However, growing resistance to higher prices may channel a greater portion of income into savings. Consumers are becoming more selective and cautious as the economy slows. Services will continue to account for the largest share of increased expenditures in 1970 as our economy becomes more specialized.



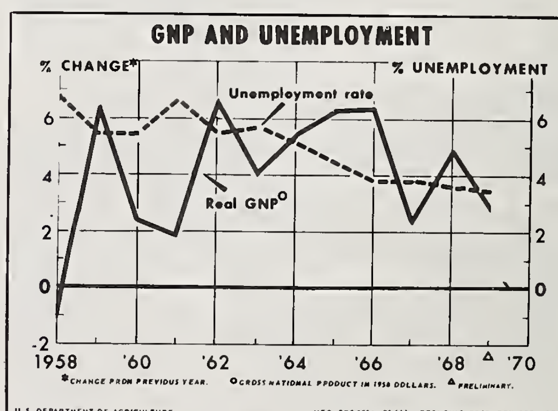


Income and Employment

Personal incomes rose substantially in 1969 but over half of the increase was eroded by the rise in consumer prices. The rise in personal incomes was slowed in the last four months of the year as weekly hours were trimmed and average earnings leveled. Average hourly earnings had made large monthly jumps upward earlier in the year as new wage contracts were negotiated. The demand for higher pay, based in part on the rise in living costs, may meet more resistance this year as productivity gains decline and demand pressures ease. After several months, the General Electric strike has been settled but other major labor disputes threaten. Such long work stoppages generally temper the demands of each side as wages and profits drop sharply during the course of the strike.

Civilian employment rose rapidly in the opening months of 1969, declined somewhat during the spring, and with some important exceptions, has been rising at a fairly slow monthly pace since July. This slowdown is even more marked in durable goods manufacturing.

The unemployment rate, seasonally adjusted, ranged in 1969 from 3.3% in January and February to 4.0% in September, then back to 3.4% in November and December. But this rate has been a reflection of the frequent rise and fall of the labor force throughout the year. Many teen-agers and women have simply entered into or dropped out of the labor force as



growth in job opportunities slowed or increased.

Even though production has been cut back, management appears to be holding many experienced workers. This has sharply reduced productivity rates and added to the cost of production. As the economy slows, it is doubtful that this "hoarding" will be maintained in 1970.

Major personal income components, change from previous quarter

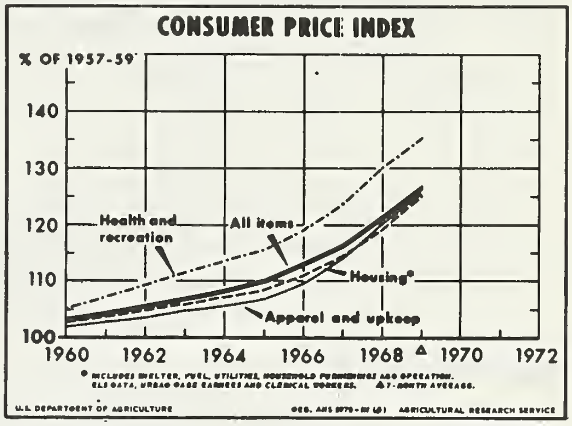
Item	1969 II qtr.	1969 III qtr.	1969 IV qtr.1/
	Bil. dol.		
Personal income	16.1	16.0	10.4
Wages and salaries	11.0	12.6	7.9
Manufacturing	3.3	3.3	.4
Nonmanufacturing	6.2	5.1	5.8
Government	1.6	4.2	1.8
Other income	4.2	2.9	1.6
Transfer payments	1.3	1.2	1.1
Social insurance payments (minus)	.5	.7	.4
Personal tax payments	4.3	-1.0	2.3
Disposable personal income	11.8	17.0	8.1
Personal outlays	11.1	7.2	9.5
Personal savings	.8	9.8	-1.5

1/ Preliminary.

Prices

The battle against inflation, at first glance at least, did not fare too well in 1969. The general price level as measured by the gross national product deflator accelerated from 4% annual rate in 1968 to nearly 5% last year. The consumer price index accelerated even more, from slightly more than 4% to 5½%, in the same period. In fact, the consumer price rise picked up extra speed in December to slightly more than a 7% annual rate. The rise in this index for all of 1969 was the sharpest in any year since 1951.

A large part of the December rise in the consumer price index reflected higher prices for eggs, fresh vegetables, and bread. Partially offsetting were some declines in beef and poultry meat prices. Housing, transportation, and medical care were other major factors in the December rise.

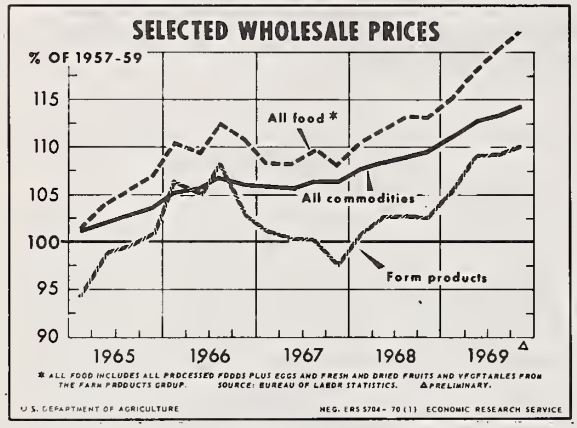


Price increases and higher taxes have eroded most of the gain in workers' earnings during the past several years. Purchasing power of factory workers has decreased for 11 consecutive months despite rising money incomes.

On the brighter side, monetary and fiscal policies succeeded in slowing the rise in gross national product as output (real GNP) declined slightly in the fourth quarter. This is considered a major step toward price moderation. Many officials have recently stated that relief from inflationary price pressures appears likely in the second half of 1970. For 1970 as a whole, the consumer price index and the GNP deflator are expected to rise more slowly than in 1969.

Wholesale prices also accelerated in 1969, rising at a 4% rate compared to a 2.5% rise in 1968. Most industrial commodities and farm products participated in the advance. Lumber and wood products, priced now about 8% below a year ago, was one of a few large commodity groups to decline as the year ended. Prices of processed foods and feeds pro-

vided most of the strength behind the substantial increase in wholesale prices in January of this year.

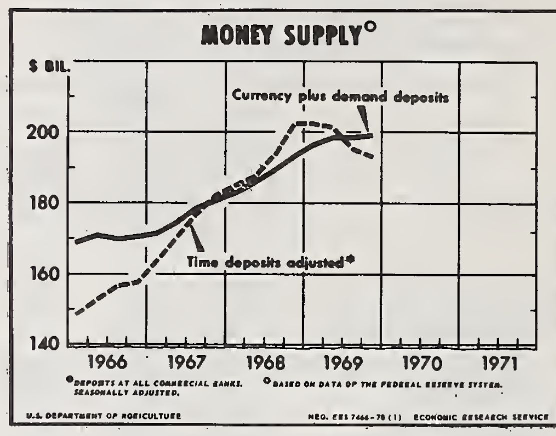


Monetary Situation

Monetary authorities apparently are taking no chances in prematurely easing monetary conditions despite signs of some moderation in demand later in the year. For the past 6 months, the money supply (currency plus demand deposits) remained virtually unchanged in contrast with 4% rate of growth in the first half and the 7% expansion during 1967 and 1968. Although there was a slight rise in member bank reserves and the money supply in the last 4 months, much of this change was due to seasonal and other technical needs.

Time deposits, considered in a broad sense a part of the money supply, declined at a 6.5% annual rate during the last half of 1969 compared with a 4% rate of decline in the first half. In an attempt to put commercial banks in a more competitive position, the Federal Reserve in January of this year raised the rates these institutions are allowed to pay savers on deposits. The rates allowed on government savings bonds and building and loan deposits have also been raised by Congress and the Federal Home Loan Bank Board, respectively.

Investors, aware of the difficulties of limiting inflation and discouraged by the recent stock market performance, have moved significantly into the bond and security markets. Yields on corporate bonds and government securities have reached new highs. Four-to-six month prime commercial paper soared to 8.9% by year's end, and 3-month Treasury Bills to 8%. In recent weeks, there has been some easing in the money markets, but interest rates remain very high with little relief in sight.



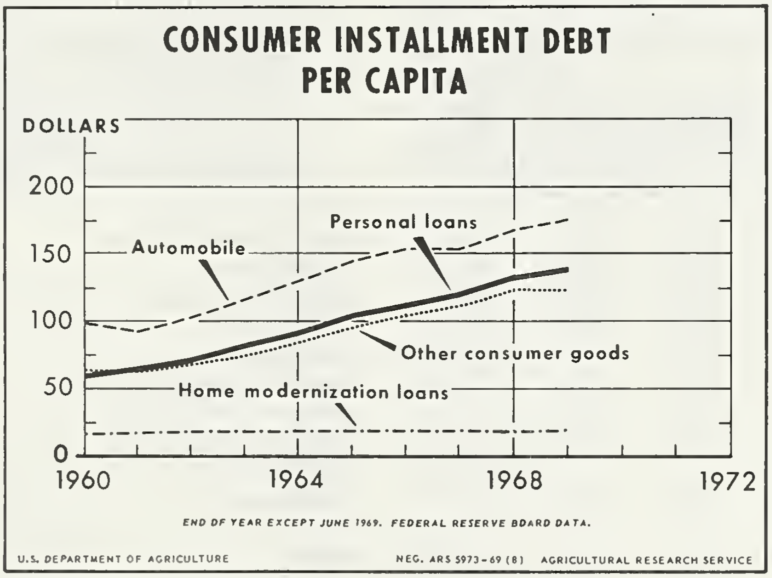
Foreign Trade

The preliminary estimate of net exports (exports minus imports) of goods and services for 1969, $2 billion, falls slightly below the 1968 level. Considering merchandise trade alone, net exports averaged $1.2 billion, falling far short of the $5 billion average level of the first 7 years of the 1960's. If price increases slow as expected, the 1970 export trade surplus is expected to show an improvement of about $1 billion, as imports advanced more slowly in response to domestic anti-inflationary measures.

Shipments abroad of civilian aircraft and agricultural commodities will likely recover from reduced 1969 levels. Sales of computers and parts probably will continue last year's strong growth pattern. Export gains are also anticipated for textile, printing, and construction machinery, semiconductor devices, instruments, chemicals, copper, lumber, and paper. Slower sales growth is expected for automotive products, materials

handling equipment, machine tools, coal, and logs, and reductions in exports of steel and aluminum are anticipated.

Prospects for a slightly improved trade situation in 1970 are not helping our present over-all international payments position. The U.S. balance of international payments, on the liquidity basis, has deteriorated in the past year. The deficit may total as high as $7 billion for 1969. This compared with a $168 million surplus in 1968 and a $3.5 billion deficit in 1967. Borrowings of Euro-dollars by large U.S. banks have had the effect of substantially increasing U.S. liquid liabilities to private individuals and institutions abroad. In addition, the declining U.S. stock market has reduced the inflow of foreign funds. And for similar reasons, U.S. purchases of foreign securities have increased during this period.



THE 1971 AGRICULTURAL BUDGET

Stressing the role of a balanced budget in the fight against inflation, President Nixon presented the Budget of the U.S. Government to Congress on February 2. It calls for a small surplus in fiscal years 1970 and 1971. The new budget, to be approved by Congress through the appropriation process in the coming year, proposed spending of $200.8 billion in fiscal 1971. This would be an increase of $2.9 billion over the amount of outlays now anticipated by the Bureau of the Budget for fiscal 1970.

Budget outlays by function 1/

Function	1969 actual	1970 est.	1971 est.
	---Billion dollars ---		
National defense	81.2	79.4	73.6
Income security	37.4	43.8	50.4
Interest	15.8	17.8	17.8
Health	11.7	13.3	15.0
Commerce	7.9	9.4	8.8
Veterans	7.6	8.7	8.5
Education	6.8	7.5	8.1
Agriculture	6.2	6.3	5.4
General government	2.9	3.6	4.1
Community and housing	2.0	3.0	3.8
International	3.8	4.1	3.6
Space	4.2	3.9	3.4
Natural resources	2.1	2.5	2.5
Other*	-5.1	-5.6	-4.1
Total outlays 2/	184.6	197.9	200.8
Total revenues	187.8	199.4	202.1
Surplus	3.2	1.5	1.3

1/ All years are on a fiscal basis. Outlays include expenditures and net lending.
2/ Totals may not add due to rounding.
* Net receipts.

The proposed 1971 Budget, in addition to being detailed by Department and Agency, is also divided into 13 functional categories for analysis of special areas. The table above shows that a number of functions including agriculture and rural development, international affairs and finance, and commerce and transportation, are scheduled to receive smaller outlays in fiscal 1971 than in fiscal 1970. Outlays for national defense programs, which constituted roughly 40% of outlays in fiscal 1970, will decline by $5.8 billion from fiscal 1970 to 1971. Reflecting changing national priorities, income security programs, the next largest functional category, will account for most of the budget increase in this period.

Agriculture and rural development

Subfunction	1969 actual	1970 est.	1971 est.
	--Billion dollars---		
Farm income stabilization	5.0	4.5	4.5
Agricultural land and water resources	.3	.3	.3
Rural housing and public facility	.3	.8	-.2
Research and other agriculture services	.6	.7	.8
Total*	6.2	6.3	5.4

* Total includes offsetting receipts.

Farm income stabilization accounts for the largest part of agriculture and rural development expenditures, $4.5 billion. Under this program, annual farm commodity price supports and acreage diversion help maintain farm incomes and limit output to requirements. In 1971, increased payments to wheat, cotton, and feed grain producers and dairy price support costs will be more than offset by reductions in net lending for agriculture credit programs and a decline in outlays for long-term land retirement programs. Other important but smaller groups within the agriculture and rural development function include agricultural land and

water resources; rural housing and public facilities; and research and other agricultural services.

The USDA Budget proposal for fiscal 1971 amounts to $8.0 billion compared with $8.4 billion in 1970 and $8.3 billion in 1969. Increased emphasis will be given in the next fiscal year within the Department to stimulating rural development, expanding consumer protection activities, and increasing food assistance. Credit programs that help meet critical rural housing needs will increase substantially.

In addition to its administration of the agriculture and rural development budget briefly outlined above, USDA also plays an important role in natural resources, domestic food assistance programs, child nutrition, and Food for Peace. The Food Stamp Program, to be substantially expanded in fiscal 1971, increases recipients' food purchasing power and will permit a gradual phasing out of direct distribution.

USDA Budget outlays 1/

Item	1969 actual	1970 est.	1971 est.
	--Billion dollars---		
Agricultural resources 2/	6.4	6.3	5.4
Health and welfare	.6	1.0	1.6
Food for Peace	1.0	1.0	.9
Natural resources	.5	.5	.6
Other*	-.2	-.4	-.5
Total	8.3	8.4	8.0

1/ All years are on a fiscal year basis. Outlays include expenditures and net lending.

2/ Excludes Farm Credit Administration, an independent agency not in the USDA budget, which expired December 31, 1968.

* Net receipts.

B ✓

A LOOK AT AGRICULTURE THROUGH INPUT-OUTPUT ANALYSIS

By
J. Dawson Ahalt

Basic Concepts

Input-output analysis is a useful aggregative framework for studying the relationships between an industry such as agriculture and the rest of the Nation's economy. This method of analysis focuses on the amount of an industry's output sold to other industries, as well as that sold directly to final users. At the same time, input-output tables show the uses of various inputs and the income flows generated in the production process.

Input-output tables are developed with a "double entry" feature which enables the information in each cell to be treated as either an input or an output. On the output side, the total value of output of an industry is distributed: (1) to other industries as intermediate products (Ip) to be used in various production processes; and (2) to final markets (Fd) in the form of final goods and services. The sum of final market sales for the entire economy equals total Gross National Product (GNP). Sales to other producing industries are omitted from GNP because their contribution is included in the final value of the good or service produced.

In the input (income flow) portion of the input-output tables, outlays are divided into purchases of various intermediate inputs (those used up in the production process) and value added by manufacturers. The amount of value added (Va) for an industry can be derived by deducting the cost of intermediate inputs used up in the production process (Ip), from the total value of output (To). 1/ Thus, value added for a particular industry is:

$$Va_i = To_i - Ip_i \qquad (1)$$

Another way of looking at value added for an industry is that it represents gross product originating in that industry. 2/ This is because value added is made up of incomes that accrue in the course of production. Thus, the Nation's GNP can be derived by summing the value added for all industries in the economy.

For the economy as a whole, purchases and sales of intermediate products are equal to each other. Thus, with intermediate products canceling out, the value added for all industries equals the total final demands in the economy which of course equals GNP. If we assume (n) industries and (m) final demand components we can write:

$$\sum_{j=1}^{n} Va_{ij} = \sum_{i=1}^{m} Fd_{ij} = GNP$$

However, for any one particular industry, there is no reason to expect either that purchases from other industries should equal sales to other industries or that value added for a particular industry should equal that industry's deliveries to final markets.

Uses of Input-Output

Although input-output analysis has many important uses, its major contribution is the ability to trace through the economy the impact of an initial shift in

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1/ This concept differs from the value added used by the Census of Manufacturing.

2/ "Gross Product Originating in Agriculture, 1947-65" by W. John Layng and J. Dawson Ahalt. Demand and Price Situation, U.S. Department of Agriculture, ERS. February 1967.

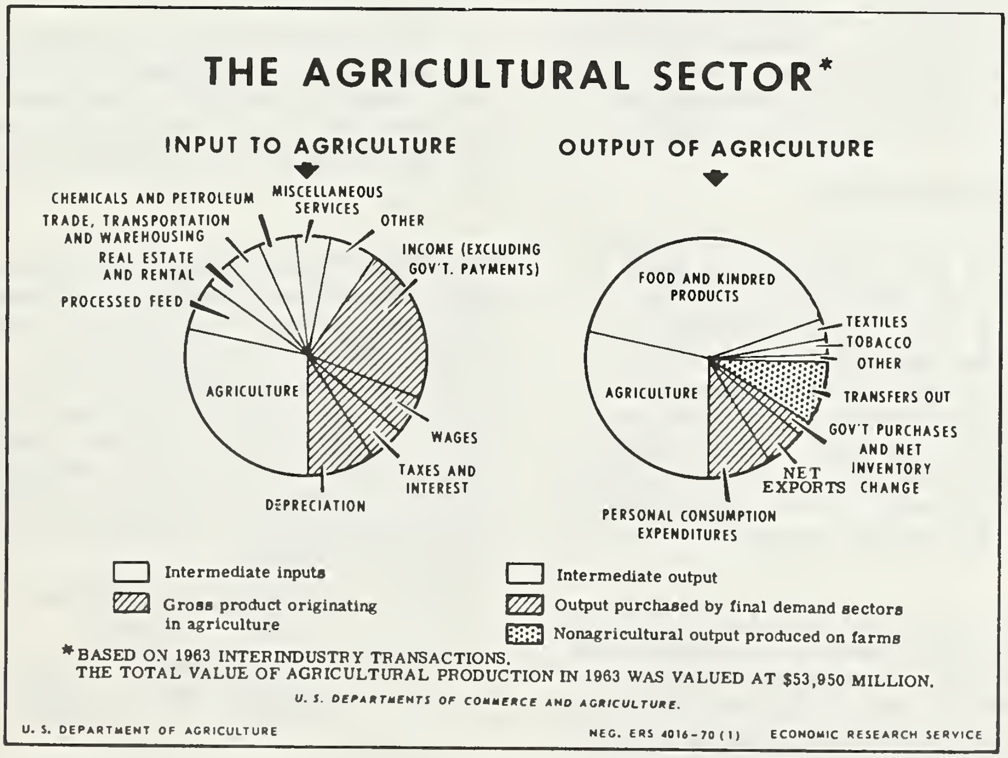
demand for the final market goods and services in a particular industry. It can measure, for example, the impact of a sharp reduction in output in one particular industry on other industries. Because of the comprehensiveness of the information on which input-output analysis is based, businessmen, administrators, and producers are able to use these studies in planning their operating strategies.

Distribution of Agricultural Output

About 84% of the total value of agricultural production is sold annually to intermediate producing industries, and the remaining 16% goes directly to various components of final demand, according to the 1963 input-output study. 3/ The trend toward an increasing share of farm products being channeled to intermediate users reflects growing consumer demand for more "built-in" services included in retail food and fiber products. By the time the costs of marketing processing, transportation, and other services have been included in the value of the final product, the average farm product portion accounts for slightly less than a fourth of the value of the retail product. This explains why changes in both the supply and the demand for farm products tend to cause much wider swings in prices at the farm than at the retail level.

The largest intermediate purchaser of farm products is the food and kindred products industry. It buys about 42% of total annual agricultural output. This industry group manufactures food and beverage products for human consumption and

3/ "Input-Output Structure for 1963," by the National Economics Division, OBE, U.S. Department of Commerce, Survey of Current Business. November 1969, Vol. 49, No. 11.



also processes feed for animal use. The second largest intermediate purchaser of farm products is the agricultural industry itself. The agricultural sector currently purchases from itself about 28% of its total output. Other intermediate purchasers include the textile industry, tobacco manufacturers, and agricultural service industries.

Direct purchases by consumers are the most important source of final demand for agricultural products, accounting for nearly 9% of the total value of output. Commodities such as eggs and fresh fruits and vegetables, are the principal farm products which go directly to final consumers. Net exports, the next most important source of final demand for farm products, absorb about 5½% of farm output. Net inventory change is also an important source of final demand for farm products because of the large inventory holdings of meat animals, grains, and soybeans. Another component included in final demand is the "transfers out" category. "Transfers out" represents sales of farmers' goods and services which are indistinguishable from products produced by other industries. Examples are fluid milk sales, farm slaughtered meats, imputed rental value of owner-occupied dwellings, and rents paid by farmers.

Inputs into Agriculture

The total value of farm output in 1968 totaled $62.3 billion, up about a fourth from the 1958 level. 4/5/ To attain this output level in 1968, farmers purchased about $37.4 billion of intermediate inputs (items used up in the production process) from various sectors of the economy. This concept of input-output includes only items charged to current account over a 1-year period. Purchases on capital account are not included.

Demand for intermediate inputs by the agricultural sector is derived from the demand for and supply of agricultural products, the relationship between farm product prices and input prices, and other factors such as previous purchase patterns, and the level of technology. An ordinary least squares regression equation relating purchases of intermediate inputs in constant dollars to several of the above variables during the 1947-68 period explained 99% of the year-to-year variation in the level of purchases. 6/ Elasticities computed at mean values indicated that a 1% increase in the level of farm output (Tvo_t) was associated with 0.9% increase in intermediate purchases (Ip_t); a 1% increase in the ratio of farm product to input prices (Po_t/Pi_t) was associated with a 0.2% increase in purchases (Ip_t); and a 1% increase in purchases in the previous year (Ip_{t-1}) was associated with a 0.4% increase in purchases (Ip_t).

The 1963 interindustry tables show that the largest share of agriculture's intermediate input purchases, 47%, was produced on the farm. These consist of such intermediate products as feeder livestock, grains for feed, seed, and manure. The amount of inputs purchased by agriculture from itself equals the amount of output the agricultural sector sells to itself.

Purchases of processed feeds from the food and kindred products industry rank second in relative importance of intermediate input purchases, accounting for about 11% of current farm outlays.

4/ Farm income concepts adjusted to include the value of nonpurchased feed, interfarm-intrastate livestock marketings, manure, animal work power, etc.

5/ "Exploring the Future of the Agribusiness Industry," paper presented by Rex F. Daly, Director, Economic and Statistical Analysis Division, ERS, USDA, before the Tennessee Farmers Cooperative, 25th Annual Meeting, Nashville, Tenn., December 5, 1969.

6/ $$Ip_t = \underset{(.091)}{-8.79868} + \underset{(.091)}{.37854}\, Tvo_t + \underset{(1.64)}{3.83964}\, \frac{Po_t}{Pi_t} + \underset{(.145)}{.44702}\, Ip_{t-1}$$

$$R^2 = .991 \quad S.E. = .297 \quad D.W. = 1.88$$

Next in order of importance are trade, transportation and warehousing--8%; chemicals and petroleum--8%; miscellaneous business services--8%; and rental charges--7%. The remainder includes outlays for short-term financing, insurance, utilities, etc.

Value added by the agricultural sector, or gross product originating in agriculture, represents the revenues left over after the costs of intermediate inputs have been deducted. Substituting the values from 1968 in the identity equation (1) above, shows a value added for 1968 of $24.9 billion:

$$\$24.9 = \$62.3 - \$37.4 \text{ (billions)}$$

Value added indicates returns to the factors of production and other nonfactor charges. In agriculture value added is made up of net farm income, the total wage bill, indirect business taxes, interest payments, and capital consumption allowances. Unlike most other industries, slightly more than half of the value added in agriculture is composed of profit-type income. This is due to the very high percentage of owner-operators in agriculture who supply the bulk of their own labor requirements. Of the remaining portion of value added, about a fifth is absorbed through depreciation of capital equipment, and the remainder is distributed to hired workers, net interest, and indirect business taxes.

The $24.9 billion of value added in 1968, or gross farm product originating in agriculture, is a measure of agriculture's unduplicated contribution to total GNP. In 1968, gross farm product amounted to 3% of total GNP, compared with slightly less than 5% in 1958. The decline in agriculture's contribution to total GNP reflects the recent very rapid growth in some nonfarm industries.

LIST OF TABLES

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